

thirteenth segments there is more of the white color and less of the violet than in the others; the tenth has two long appendages, one on either side of the lateral black lines, and two very small ones, one on each of the white bands; the eleventh has also two appendages on the lateral lines, but not so long as the others, and two on the white bands longer than the rest; the twelfth segment has only two on the lateral lines and shorter than the others. On the anal cover there is a black triangle. The horny feet are black, and the fleshy ones of an ashy dark violet with their extremities black, and on their upper part a small protuberance of an ash color inclining to yellow. Length of the larva is 30 millimeters.

The larva feeds on one of the *Aristolochiæ*. It remains about thirteen days in the pupa state.

Santiago de Cuba June 16, 1888.

**Descriptions of some new or little known
MICROGASTERINÆ.**

BY CLARENCE M. WEED.

Soon after the publication of my "Notes on Some Illinois Microgasteri,"* Mr. E. T. Cresson kindly offered to send me the Microgasterinæ in the collection of the American Entomological Society for arrangement and study, and the present paper is the result of a preliminary examination of the material therein contained.

Microplitis maturus n. sp.—Length 3.5 mm. ♂ ♀. Black; antennæ, clypeus and mandibles ferruginous; palpi light yellow; tegulæ and legs (except tarsi and posterior coxæ, which are fuscous) testaceous; anterior half of abdomen, except tergum of first segment, also testaceous. Mesonotum slightly shining, punctate. Scutellum punctate. Metanotum reticulate, with median and lateral carinæ. Tergum of first abdominal segment rugulose; remaining terga smooth and shining. Wings hyaline; veins yellowish brown; stigma, except spot on inside, darker; areolet subrhomboidal, large; ovipositor concealed.

Described from four specimens from New York and Connecticut in the collection of the American Entomological Society. The depth of coloring of the abdomen varies considerably. One of the specimens was labeled *M. maturus*, Cresson MS., and I have adopted the name thus proposed.

* Bull. Ill. St. Lab. Nat. Hist. Vol. III, Art. 1, p. 1.

Microplitis terminatus n. sp.—Length 5 mm. ♂ ♀. Black; scape, labrum, mandibles, palpi, tegulae, legs (except posterior coxae), ventrum and posterior half with more or less of margins of anterior half of dorsum of abdomen testaceous. Antennae brownish, fuscous at tip, reaching slightly beyond thorax. Mesonotum opaque, punctate, with lobes well developed. Scutellum opaque, punctate. Metanotum coarsely reticulate, with prominent median and lateral carinae. Tergum of first abdominal segment reticulate, with longitudinal median excavation. Tergum of second segment smooth and shining on anterior angles; otherwise with rather thick punctures. Remaining terga smooth. Wings subhyaline; veins yellowish brown, darker apically; stigma dark brown, with lighter spot on inside. Ovipositor concealed.

Described from five Illinois specimens in the collection of the American Entomological Society. One of these was labeled *Microgaster terminatus*, Cresson MS., and I have adopted the specific name thus proposed.

Apanteles hallii (Pack.)—*Microgaster hallii* Packard, Am. Nat. vol. xi, p. 52, 1877.—Length 3 mm. Black; antennae piceous; mandibles and palpi dark reddish brown. Legs brownish black, posterior tibiae slightly paler. Mesonotum slightly shining, finely punctate. Scutellum shining, nearly smooth. Terga of first and second abdominal segments shining, scabrous; remaining terga smooth and shining. Tegulae piceous. Wings hyaline, veins brownish black, lighter apically; stigma dark yellowish brown.

Described from one of the original type specimens in the collection of the American Entomological Society. The specimen had three labels upon it: the first being "Polaris Bay, June, 1872, Bessels;" the second, "*Microgaster Hallii* Pack.;" and the third, "From Dr. Packard." The first and second I judge to be in Dr. Packard's handwriting, and the third in that of Mr. Cresson. The specimen at hand is somewhat imperfect, and the legs and wings are so compressed that I am not certain of the sex.

Dr. Packard describes the cocoon as of "the usual cylindrical shape; white."

Apanteles lunatus (Pack.)—*Microgaster lunatus*, Packard, Proc. Bost. Soc. Nat. Hist. vol. xxi, p. 28. *Apanteles lunatus* Riley, Am. Nat. vol. xvi, p. 680.—Length 3—3.5 mm. ♂ ♀. Black, palpi whitish or light brown. Antennae piceous, almost as long as body. Legs red, coxae black, posterior femora and tibiae with dusky tips, tarsi also more or less dusky. Mesonotum, with scutellum, densely confluent punctured. Metanotum indistinctly reticulate, without carinae. First and second abdominal terga rugosely punctate, and extreme base of third also slightly sculptured; remaining terga smooth and shining. Wings hyaline, iridescent; veins and stigma brown.

Described from one of the original type specimens bred from *Pupilio asterias* by Dr. Riley; five others bred in Illinois from the same species by Prof. G. H. French; and two Massachusetts specimens also bred from this species.

This insect is at times quite common in southern Illinois, and as I am informed by Prof. French, has noticeably decreased the members of the handsome butterfly upon which it preys. The cocoons are yellow, 5 mm. long by 2.2 mm. in diameter. They are spun singly upon grass blades or similar materials, and have little loose silk.

Apanteles carduicola (Pack.)—*Microgaster carduicola* Packard, Proc. Bost. Soc. Nat. Hist. vol. xxi, p. 27.—Length 3 mm. ♂ ♀. Black; palpi white; antennæ, tegulæ, labrum and mandibles piceous; tibiæ and apical half of femora of first and second legs and nearly whole of posterior tibiæ, testaceous; tarsi dusky. Wings hyaline; veins, except at base, and stigma, yellowish brown. Mesonotum somewhat shining, finely, thickly punctured. Scutellum shining, nearly smooth. Metanotum rugose, with no median carina. Tergum of first abdominal segment coarsely punctured; of second more finely punctured; remaining terga smooth and shining; ovipositor concealed.

Described from two of the original type specimens in the collection of the American Entomological Society, received from Dr. Packard.

Microgaster facetosus n. sp.—Length 3.5 mm. ♂ ♀. Black; antennæ (especially beneath), labrum and mandibles ferruginous; palpi whitish; four anterior legs light honey yellow; posterior legs honey yellow, with basal half of coxæ, tips of femora, apical third of tibiæ and tarsi entirely, fuscous; basal half of ventrum of abdomen, with margins of three anterior terga and narrow transverse band just behind posterior border of third tergum light yellow. Antennæ as long as body. Mesonotum slightly shining, scabrous. Scutellum punctate. Metanotum reticulate, with median carina. First, second and base of third abdominal terga rugulose; margins soft and light colored; remaining terga smooth and shining. Wings hyaline; tegulæ and wing veins yellowish brown; stigma darker; radius indistinct; areolet triangular. Posterior coxæ two thirds as long as abdomen.

Described from two Illinois specimens in the collection of the American Entomological Society.

A specimen from New Jersey resembles this species very much, but differs so in its darker color, reticulate scutellum, etc., that I prefer to leave it for the present without referring it to this species or describing it as distinct.

Microgaster zonaria Say.—Length 2.5 mm. ♂ ♀.—Black; scape beneath, clypeus, labrum and mandibles, legs, except claws and posterior tarsi (which are fuscous) ventrum of abdomen and band on its dorsum (terga two and three in male, and same with more or less of four in female) honey yellow; palpi whitish; tegulæ and insertion of wings straw yellow. Antennæ brownish; as long as body. Mesonotum shining with minute, regular punctures. Scutellum shining, sparsely punctured. Metanotum shining, punctured, with indistinct carinæ enclosing a broadly triangular place on middle. Tergum of first abdominal segment deeply punctured; remaining terga smooth and shining; sheath of ovipositor black, slightly more than half as long as abdomen; ovipositor

